

# IskraMAG V1

Electromagnetic flow meter IskraMAG V1 is intended for professional application and measurement of flow rates of electrically-conductive liquids in water and heat-supply systems, food-processing and chemical industries. They meet the most demanding requirements on high measurement accuracy, long-term stability and hygienic standard. Measurements in both directions of flow are possible. The meter sensor has no movable mechanical parts and its inclusion in the piping system will have no effect on the hydraulic or pressure flow conditions. The converter unit provides for sensor energising and processing of the sensor signals, and also offers functions of liquid batching control, detection of empty piping, internal meter status diagnostics, automatic cleaning of electrodes and selection of flow units in data visualisation. The flow meter has frequency, pulse and current outputs, as well as interfaces to the USB and RS 485 communication lines.



# **Meter Specification**

IskraMAG v1	
nominal diameter/size	DN6 to DN1200 / 1/4" to 48"
nominal pressure [bar/psi]	6, 10, 16, 25 or 40 (related to diameter) / 150, 300, 600 (related to size)
min. conductivity of measured liquidµ	$20\mu S/cm$ , on agreement with the manufacturer down to $5\mu S/cm$
electrode material	Stainless steel, grade 1.4571 (316Ti), Hastelloy C276, Titanium, Tantalum, Platinum-Rhodium (PtRh10)
ambient temperature	-5°C to 55°C (23° to 131°F)
sensor lining	soft rubber, hard rubber, rubber for drinking water, PTFE, E-CTFE
design version	compact or remote transmitter
piping connection	flanged or flangeless
max. temperature of measured liquid	up to 150°C (302°F), depending on sensor lining
measurement accuracy EN ISO 4064-1 (OIML R 49) *	2
measuring range	0.1 to 10 m/s (0.33 to 33 ft/s)
indication of empty piping	from DN50 / 2" upwards
displayed units	I, m³, US gal, US bbl
outputs (insulated)	current (0) 4 to 20mA frequency 0 to 1,000Hz pulse, 0.001 to 1,000 litres per pulse communication line USB, RS 485
power supply	24/115/230V ±10%, 50 to 60Hz (AC), 24V ±10% (DC)
protection class	IP 67 (IP 68)

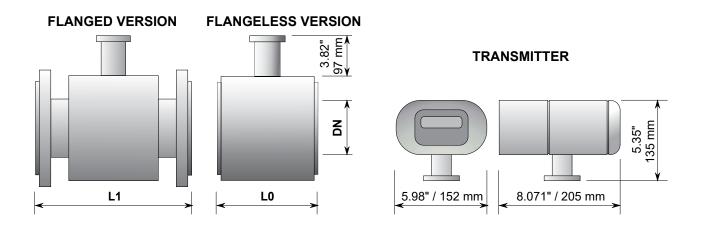
<sup>\*</sup> optional measurement accuracy ± 0.2% for 10 to 100 % of  $\mathrm{Q_4}$  ; ± 0.5% for 5 to 100 % of  $\mathrm{Q_4}$ 

#### **DESIGN VERSION, CONFIGURATION AND TYPE DESIGNATION**

design version		COMPACT		REMOTE			
configuration		ECONOMIC	COMFORT	ECONOMIC	COMFORT		
type designation	flanged	FN2010.1	FN2014.1	FN2011.1	FN2015.1		
	flangeless	FN2020.1	FN2024.1	FN2021.1	FN2025.1		

### RATED INTERNAL DIAMETER AND SENSOR LENGTH [mm]

pressure	40 bar/ 150lb 16 bar/150lb				10 bar/150lb				6 bar/150lb							
diameter [mm]	20	25 to 40	50 to 80	100	125	150	200	250	300	350	400 to 600	700	800	900	1000	1200
size [in]	3/4"	1" to 1 1/2"	2" to 3"	4"	5"	6"	8"	10"	12"	14"	16" to 24"	28"	32"	36"	40"	48"
L1 [mm]	200	200	200	250	250	300	350	450	500	550	600	700	800	900	1000	1200
L1 [in]	7.9	7.9	7.9	9.8	9.8	11.8	13.8	17.7	19.7	21.7	23.6	27.6	31.5	35.4	39.4	47.2
LO [mm]	74	104	104	104	134	134	219	_	-	-	-	-	-	-	_	-
LO [in]	2.9	4.1	4.1	4.1	5.3	5.3	8.6	_	_	_	_	-	_	-	_	-





### **SMART WATER.**

Every drop of water is precious for the planet and for the future life as we know it.

